SDCS-ER-76-106

SPECIAL DATA COLLECTION SYSTEM EVENT REPORT KODIAK ISLAND REGION, 17 June 1976

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SDCS EVENT REPORT NO. 106

Kodiak Island Region, 17 June 1976

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	"P" Arrival	Origin Time	Lat.	Long.	m_b	M_s
NORSAR	02:55:11.3	02:44:57	57 N	154 W	5.3	N/A
Hagfors	02:55:17.5	02:44:47	56 N	156 W	N/A	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

02:44:52.7	57.2N	154.6W	5.0	4.0

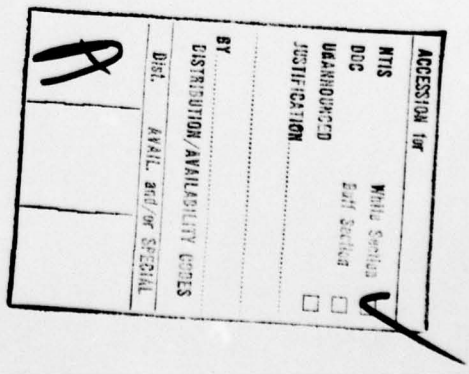
The programs used for LASA and NORSAR data recovery, previously listed as undergoing modifications, are now usable. Beginning with the previous report (#105), data from these two arrays, both short period and long period, will be included whenever possible.

FN-WV was INOP during this period.

Short-period signals associated with this event were recorded at all operational SDCS stations, LASA and NORSAR. All SDCS short-period data were retrieved from the field-station digital tapes, and horizontal channels were rotated. Short-period "P" arrival time for LASA was obtained from their Teleseism Event Report, because information from the detection processing system was unavailable. NORSAR short-period analysis data were obtained from their bulletin. Array trace presentation for NORSAR was obtained from their event tape.

Long-period signals associated with this event were recorded at all operational SDCS stations. Horizontal channels were rotated. Long-period array data for both LASA and NORSAR were unobtainable.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response).



STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES DEG MN SECS	ELEVATION METERS	INSTRUMENTATION SHORT-PERIOD	LONG PERIOD
CPSO	McMinnville, Tennessee	35 35 41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32 58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41 19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09 43.0 N 067 59 09.0 W	213	KS36000	KS36000
NORSAR	Kjeller, Norway	60 49 25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50 20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41 41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be $16^{\circ} \pm 5^{\circ}$ based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

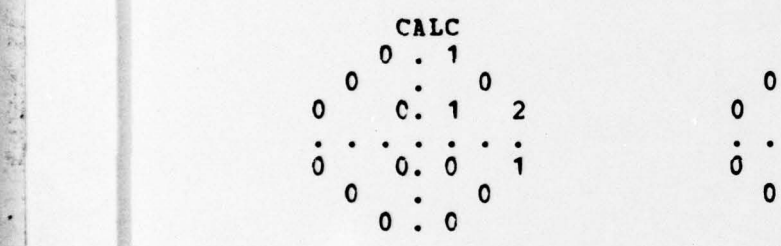
HYPOCENTER DETERMINATION

INPUT FOR EVENT 17 JUN 76
02:44:57.0 57.000N 154.000W 0KM.

STA.	ARRIVAL	RESIDUALS CALC	RESIDUALS REST	DIST. REST	AZ. REST
WH2YK	02 47 26.5	-0.1	-0.0	10.7	63.0
LAO	02 51 12.1	1.0	1.3	31.0	88.8
RK-ON	02 51 47.7	0.2	-0.4	35.3	73.7
CPSO	02 53 45.4	-1.3	-1.2	49.9	84.7
HN-ME*	02 54 01.0	4.7 *	3.9 *	51.3	62.8
NAO	02 55 11.3	0.1	0.2	61.7	8.0

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
02:45:04.8	57.671N	153.842W	69. CALC	0.8	4	5
02:44:52.7	57.244N	154.636W	0. REST	0.9	3	5



CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 1.69
MAJOR 82.6KM. MINOR 54.3KM. AZ= 22 AREA= 14092 SQ.KM. REST

DATA SUMMARY

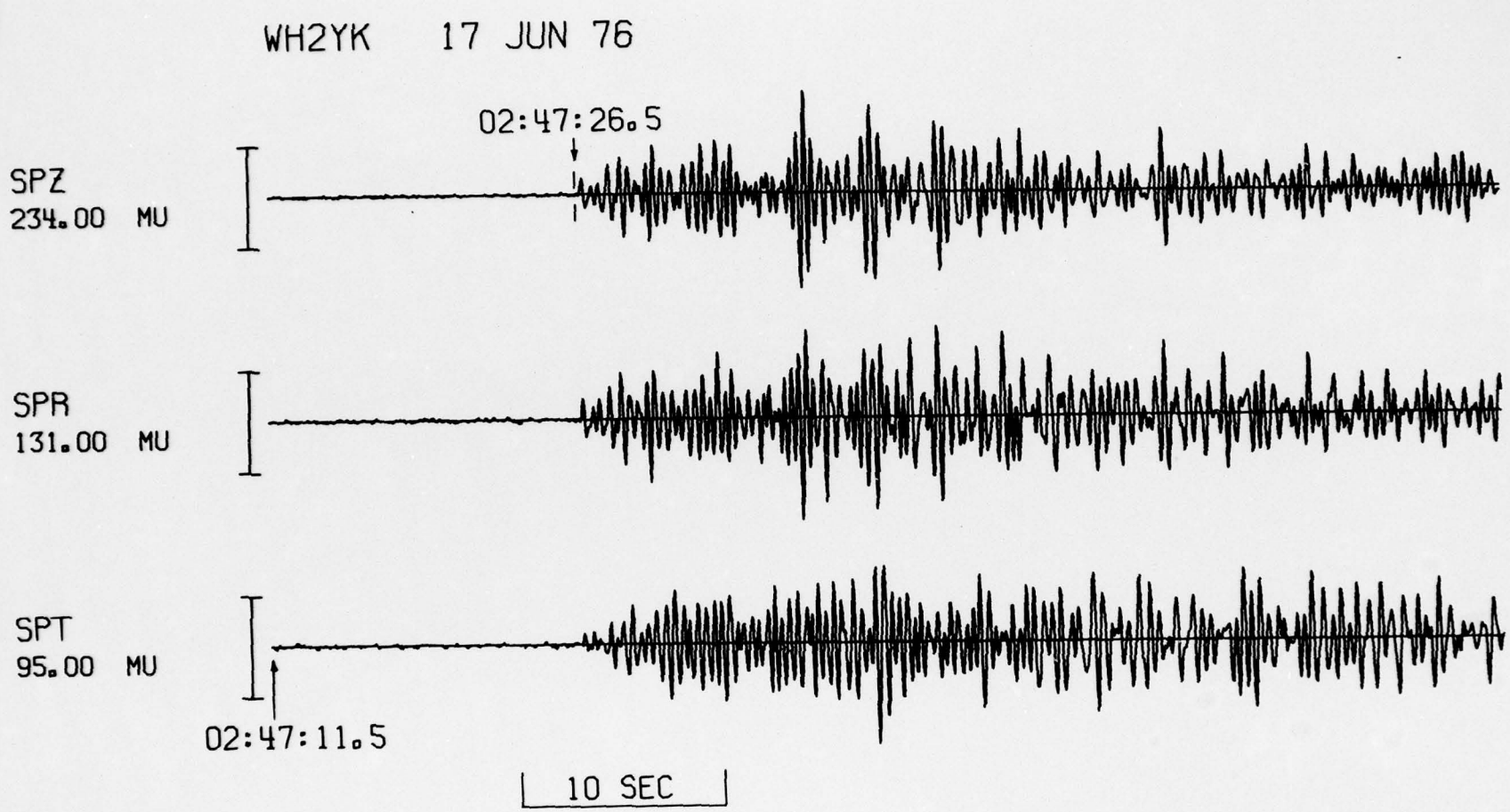
INPUT FOR EVENT 17 JUN 76
02:44:57.0 57.000N 154.000W 0KM.

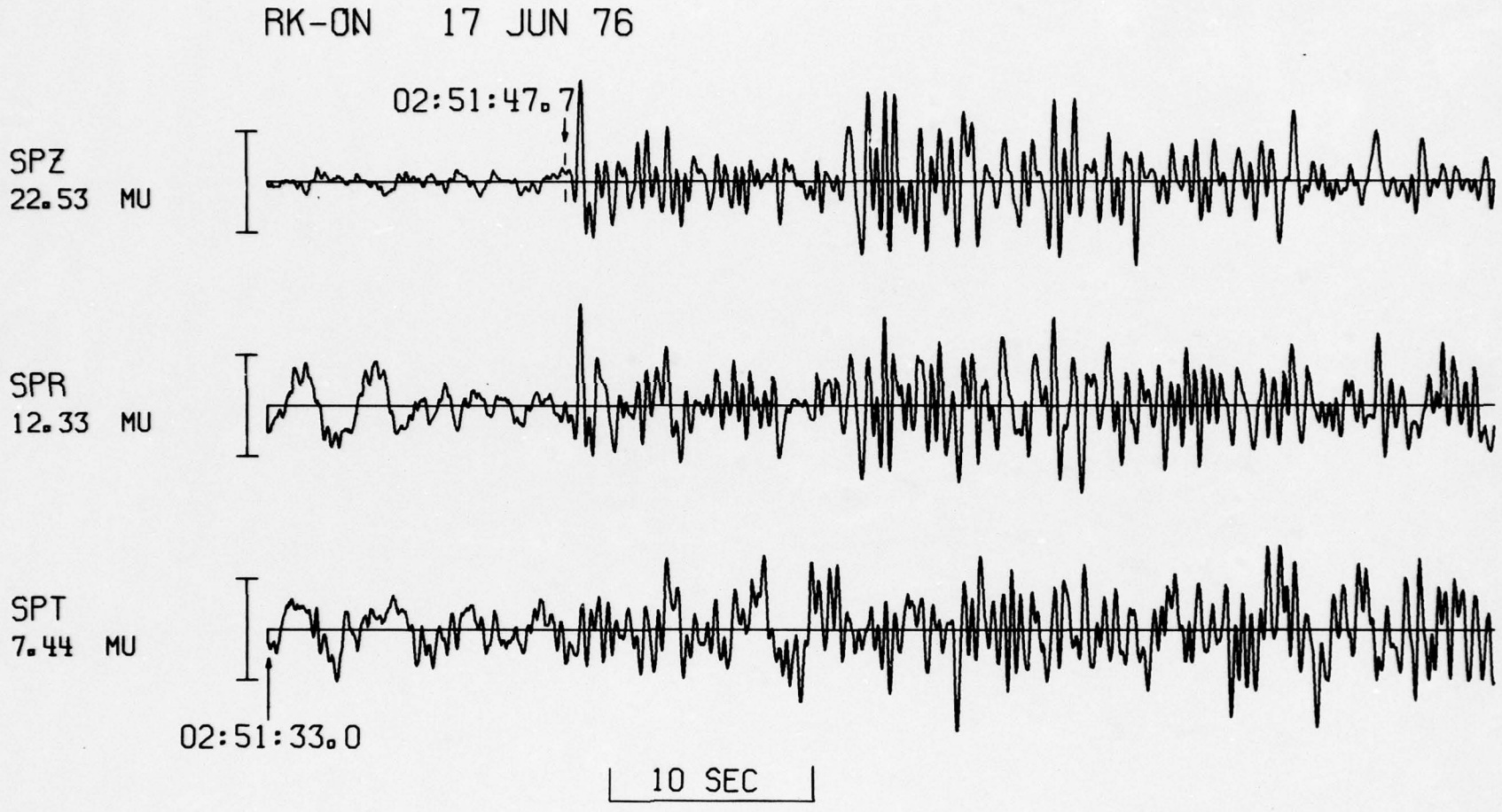
STA.	PHASE	ARRIVAL TIME	INST	PER	A/T	MAGNITUDE MB	MS	DIR	DIST
WH2YKM	EP	02 47 26.5	SPZ	0.4	136.	6.06			10.7
WH2YK	LQ	02 51 08.0	LPT	22.0	42.				
WH2YK	LR	02 52 08.0	LPZ	18.0	58.		3.91		10.7
LAO	EP	02 51 12.1	SAB	99.9	9999.				
RK-ON	EP	02 51 47.7	SPZ	0.6	21.	4.69			35.3
RK-ON	LQ	03 03 07.0	LPT	26.0	12.				
RK-ON	LR	03 05 32.0	LPZ	22.0	21.		3.99		35.3
CPSO	EP	02 53 45.4	SPZ	0.5	30.	4.89			49.9
CPSO	LQ	03 10 35.0	LPT	23.0	11.				
CPSO	LR	03 15 03.0	LPZ	20.0	23.		4.18		49.9
HN-ME*	EP	02 54 01.0	SPZ	0.6	11.	4.44			51.3
HN-ME	LQ	03 12 42.0	LPT	24.0	19.				
HN-ME	LR	03 16 40.0	LPZ	17.0	19.		4.11		51.3
NAO	EP	02 55 11.3	AB	0.8	80.	5.57			61.7

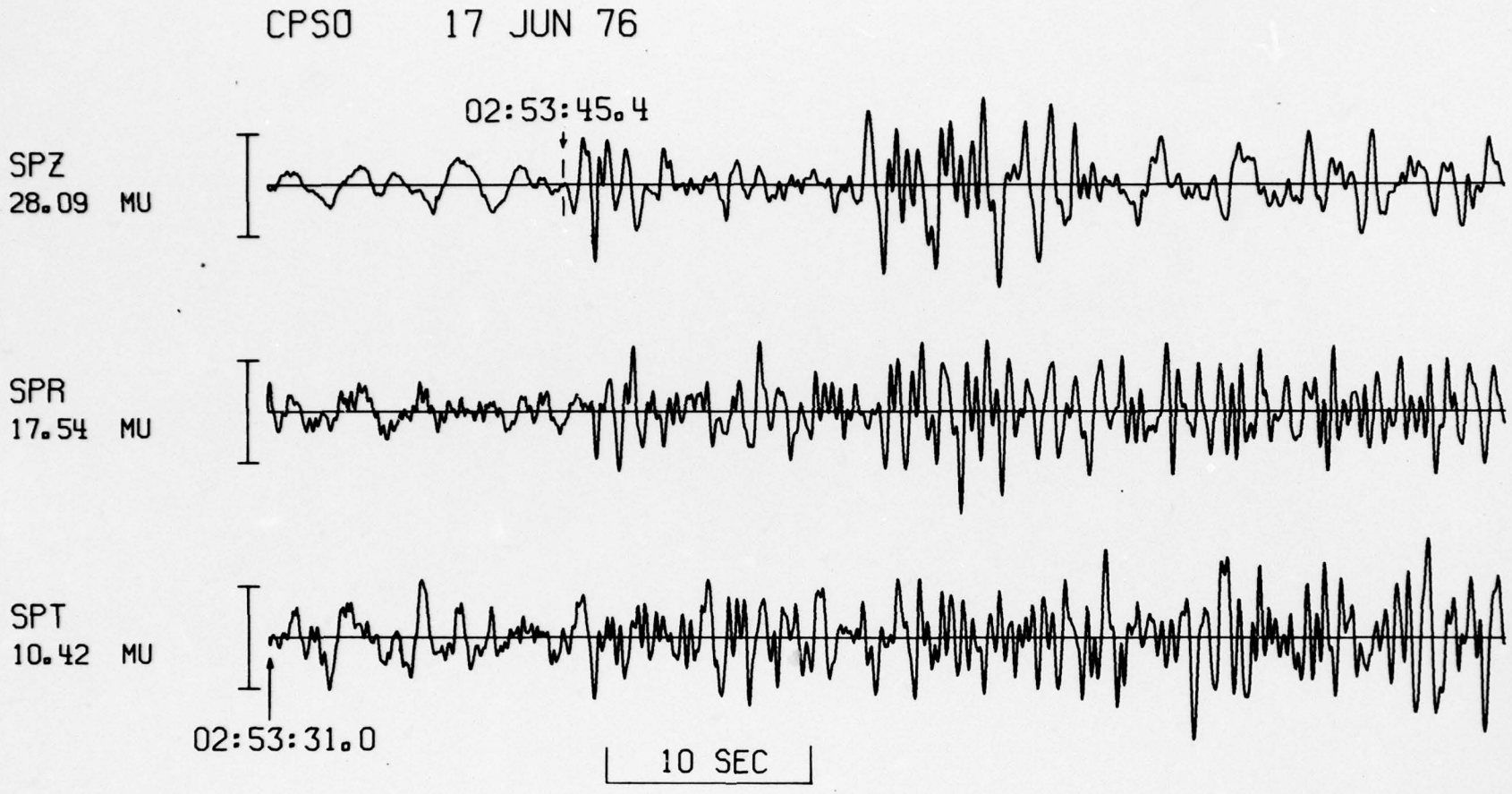
ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA	LPMAG	LPSDV	LPSTA
02:45:04.8	57.671N	153.842W	69. CALC	5.01	0.38	3	4.04	0.1	4
02:44:52.7	57.244N	154.636W	0. REST	5.05	0.46	3	4.05	0.1	4

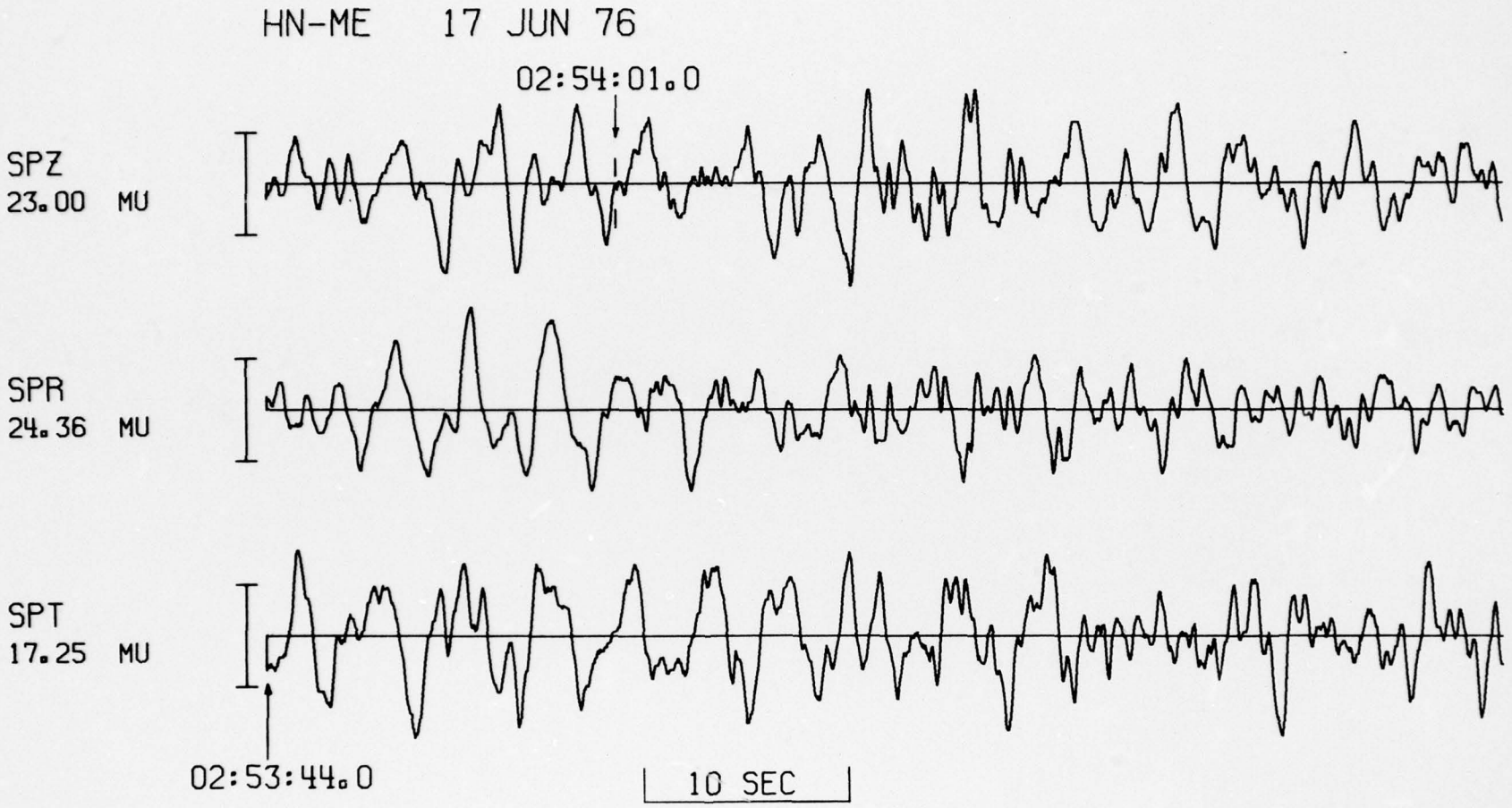
Short-period magnitudes (m_b) used in averaging are restricted to those recorded at distances between 20 and 110 degrees from the epicenter.

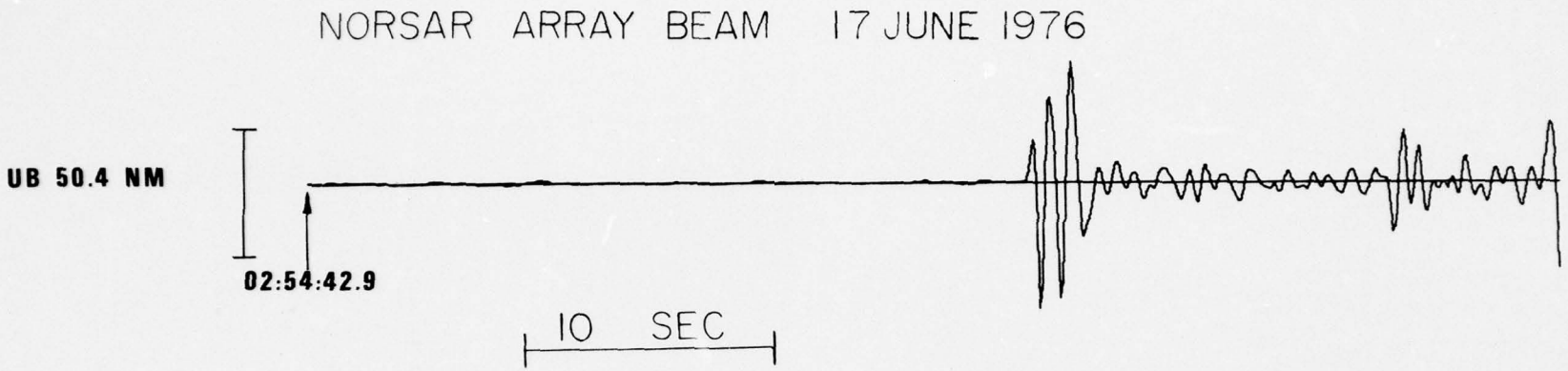
HN-ME was not used due to low signal to noise ratio, which precluded calling an accurate start.

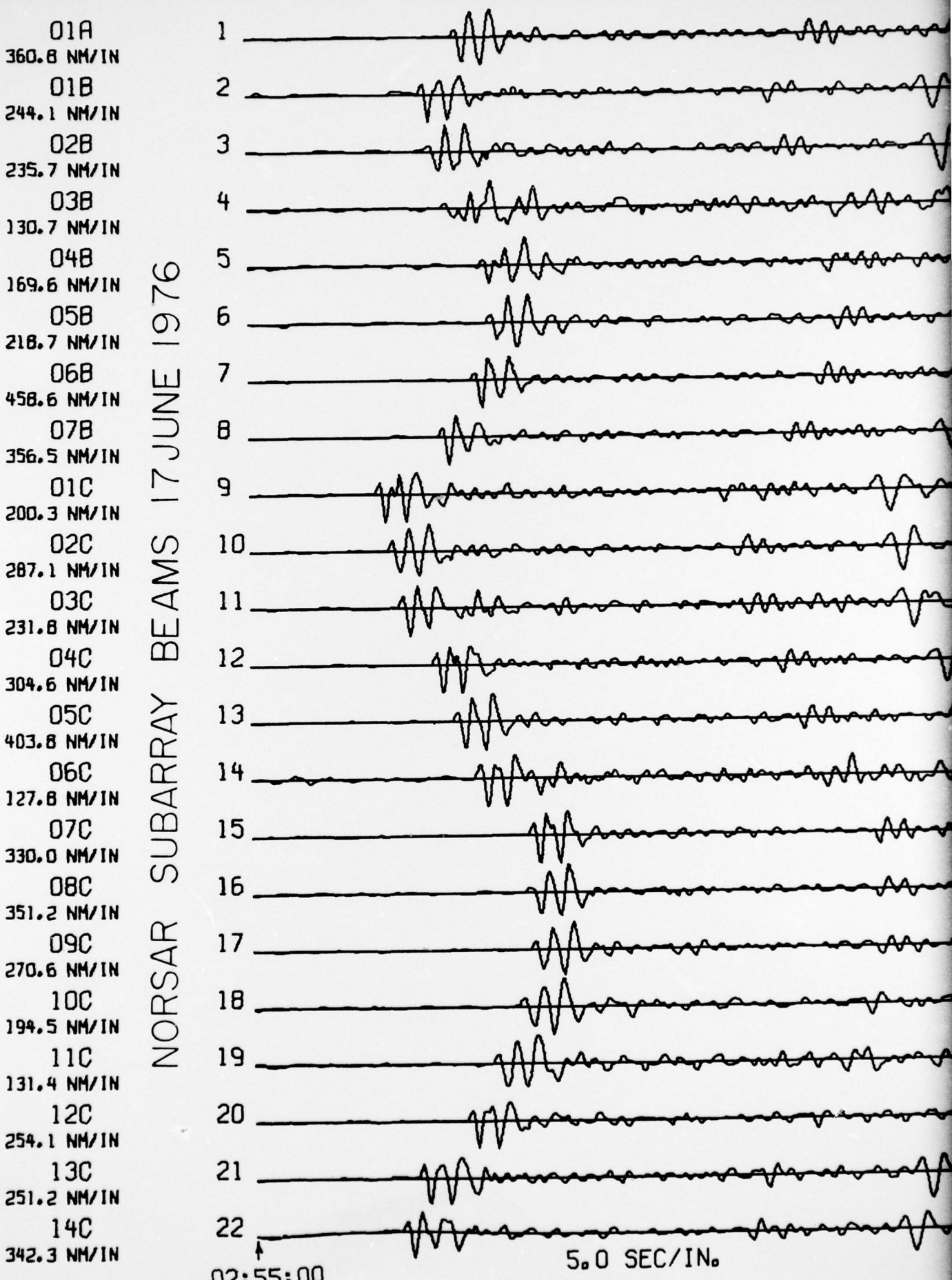

WH2YK 17 JUN 76
02:47:26.5
SPZ
234.00 MU
SPR
131.00 MU
SPT
95.00 MU
02:47:11.5
10 SEC

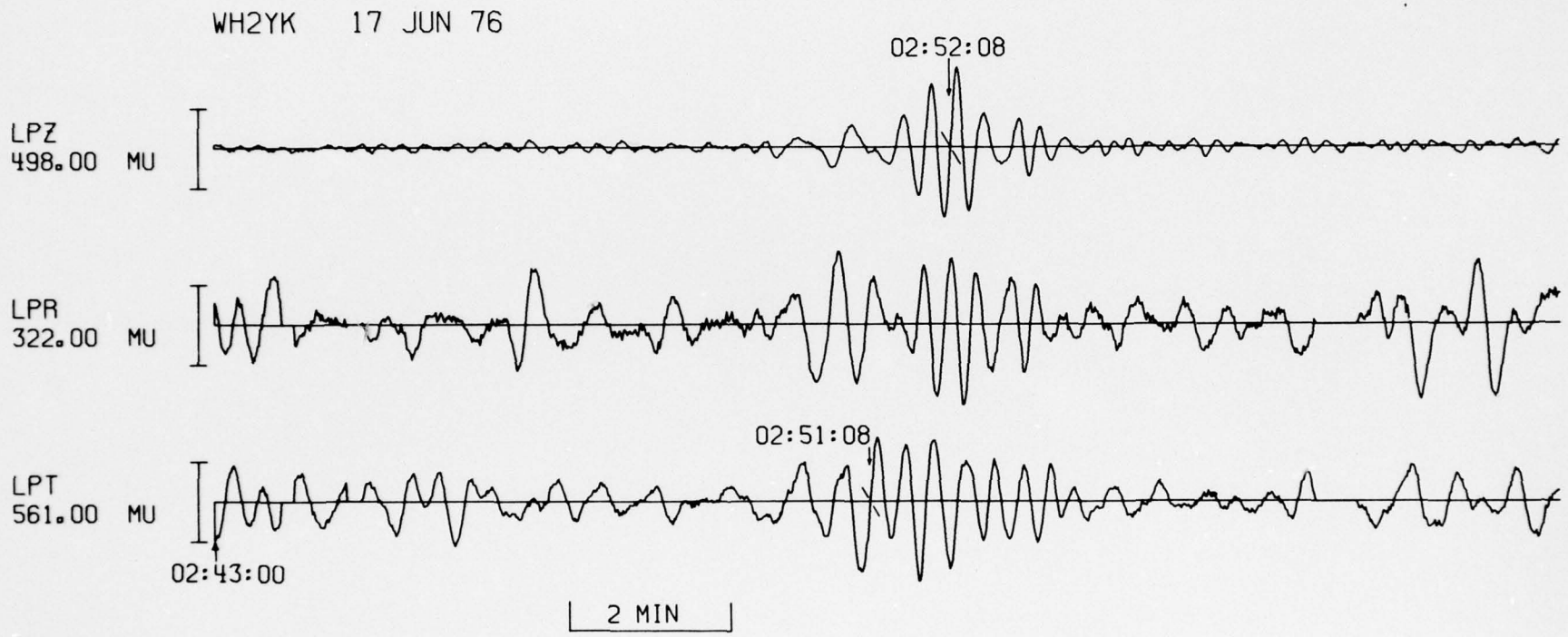

RK-ON 17 JUN 76
02:51:47.7
SPZ
22.53 MU
SPR
12.33 MU
SPT
7.44 MU
02:51:33.0
10 SEC

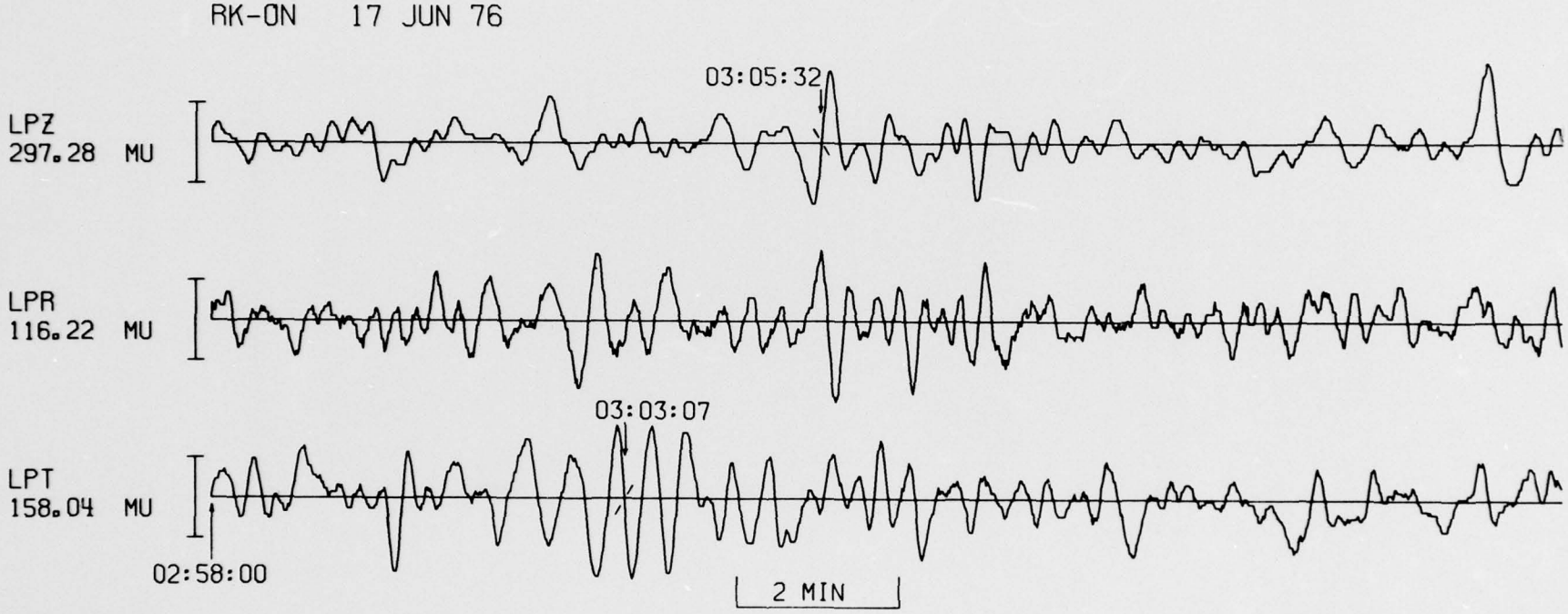

CPSO 17 JUN 76
02:53:45.4
SPZ
28.09 MU
SPR
17.54 MU
SPT
10.42 MU
02:53:31.0
10 SEC

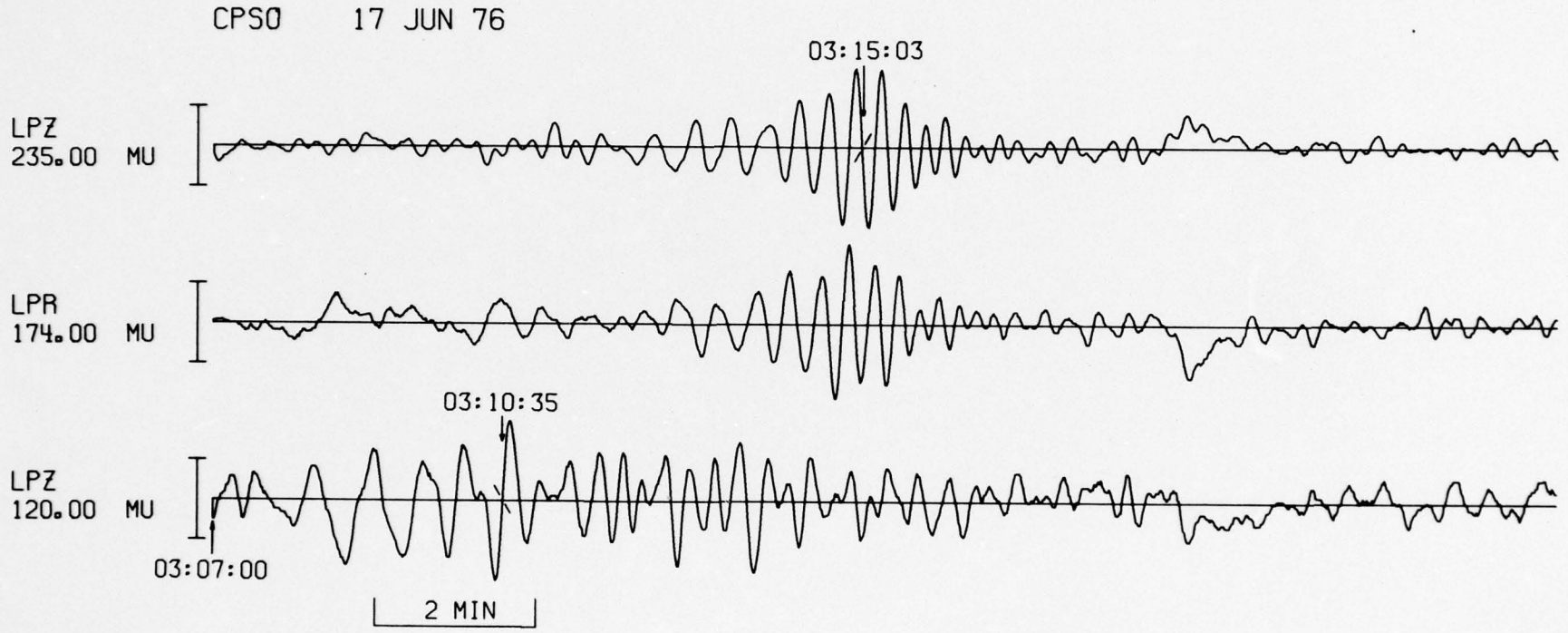

HN-ME 17 JUN 76
02:54:01.0
SPZ
23.00 MU
SPR
24.36 MU
SPT
17.25 MU
02:53:44.0
10 SEC

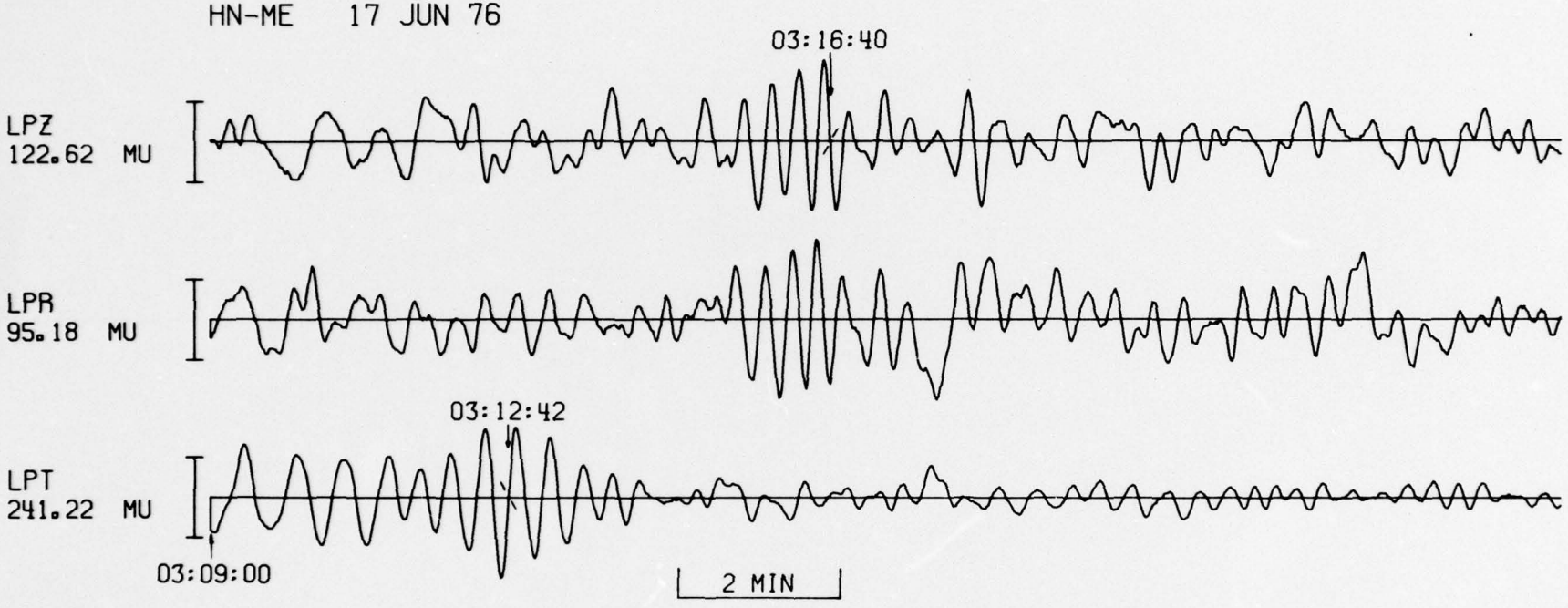

NORSAR ARRAY BEAM 17 JUNE 1976
UB 50.4 NM
02:54:42.9
10 SEC


01A
360.8 NM/IN
01B
244.1 NM/IN
02B
235.7 NM/IN
03B
130.7 NM/IN
04B
169.6 NM/IN
05B
218.7 NM/IN
06B
458.6 NM/IN
07B
356.5 NM/IN
01C
200.3 NM/IN
02C
287.1 NM/IN
03C
231.8 NM/IN
04C
304.6 NM/IN
05C
403.8 NM/IN
06C
127.8 NM/IN
07C
330.0 NM/IN
08C
351.2 NM/IN
09C
270.6 NM/IN
10C
194.5 NM/IN
11C
131.4 NM/IN
12C
254.1 NM/IN
13C
251.2 NM/IN
14C
342.3 NM/IN
NORSAR SUBARRAY BEAMS 17 JUNE 1976
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
02:55:00
5.0 SEC/IN.


WH2YK 17 JUN 76
02:52:08
LPZ
498.00 MU
LPR
322.00 MU
02:51:08
LPT
561.00 MU
02:43:00
2 MIN


RK-ON 17 JUN 76
03:05:32
LPZ
297.28 MU
LPR
116.22 MU
03:03:07
LPT
158.04 MU
02:58:00
2 MIN


CPSO 17 JUN 76
03:15:03
LPZ
235.00 MU
LPR
174.00 MU
03:10:35
LPZ
120.00 MU
03:07:00
2 MIN


HN-ME 17 JUN 76
03:16:40
LPZ
122.62 MU
LPR
95.18 MU
03:12:42
LPT
241.22 MU
03:09:00
2 MIN